AMENDMENTS TO THE CLAIMS

1. (original) A method of resetting a double valve comprising the steps of:

connecting a source of pressurized fluid to a reset port;

actuating first and second reset pistons in response to said pressurized fluid to reset first and second movable valve units of said double valve, respectively;

venting first and second pilot chambers when said first and second reset pistons are actuated, said first and second pilot chambers corresponding to first and second pilot valves for actuating said first and second movable valve units, respectively, wherein said venting prevents said first and second movable valve units from moving out of a deactuated position, respectively;

removing said source of pressurized fluid from said reset port;

retracting said first reset piston so that said second pilot chamber receives pressurized fluid while said first pilot chamber continues to be vented;

retracting said second reset piston after a predetermined delay time following retraction of said first reset piston, said predetermined delay time being sufficient to allow said second pilot chamber to become substantially pressurized; and

if said second pilot valve is actuated when said second reset piston is retracted, then said pressurized fluid in said second pilot chamber driving said second movable valve unit out of a deactuated position during a time that pressurized fluid in said first pilot chamber is insufficient to drive said first movable valve unit out of a deactuated position.

2. (original) The method of claim 1 wherein, if said second pilot valve is not actuated when said second reset piston is retracted, then said first pilot chamber becomes substantially pressurized, thereby completing said resetting of said double valve.

3. (original) A control valve system comprising:

a housing defining an inlet, an outlet, an exhaust, and a reset port, said inlet

and said reset port being adapted to receive pressurized fluid;

a first movable valve unit including a first exhaust poppet and a first inlet poppet, wherein said first exhaust poppet is movable between an open position for coupling said outlet to said exhaust and a closed position for isolating said outlet from said exhaust, wherein said first inlet poppet is movable between an open position for coupling said outlet to said inlet and a closed position for isolating said outlet from said inlet, wherein said first movable valve unit is movable to an actuated position, a deactuated position, and an intermediate position, wherein said actuated position comprises said first inlet poppet being in its open position and said first exhaust poppet being in its closed position, wherein said deactuated position comprises said first inlet poppet being in its closed position and said first exhaust poppet being in its open position, and wherein said intermediate position comprises said first inlet poppet and said first exhaust poppet both being at least partially open;

a second movable valve unit including a second exhaust poppet and a second inlet poppet, wherein said second exhaust poppet is movable between an open position for coupling said outlet to said exhaust and a closed position for isolating said outlet from said exhaust, wherein said second inlet poppet is movable between an open position for coupling said outlet to said inlet and a closed position for isolating said outlet from said inlet, wherein said second movable valve unit is movable to an actuated position, a deactuated position, and an intermediate position, wherein said actuated position comprises said second inlet poppet being in its open position and said second exhaust poppet being in its closed position, wherein said deactuated position comprises said second inlet poppet being in its closed position and said second exhaust poppet being in its open position, and wherein said intermediate position comprises said second inlet poppet and said second exhaust poppet both being at least partially open;

first and second pilot valves disposed at one end of said first and second movable valve units, respectively, for selectably urging said first and second movable valve units to said respective actuated positions;

first and second pilot timing chambers for storing pressurized fluid to be

provided to said first and second pilot valves, respectively;

a flow restrictor coupled to said reset port;

first and second reset pistons for being extended to drive said first and second movable valve units to their deactuated positions, respectively, in response to pressurized fluid from said reset port, wherein said second reset piston communicates with said reset port via said flow restrictor, and wherein said first reset piston communicates with said reset port via a path not including said flow restrictor;

a vent coupled to atmosphere; and

first and second anti-tiedown valves each coupled between said vent and said second and first pilot timing chambers, respectively, said anti-tiedown valves being opened in response to said first and second reset pistons being extended, respectively.

4. (original) The control valve system of claim 3 further comprising a reset timing chamber coupled to said second reset piston.

5. (original) The control valve system of claim 3 wherein said first and second anti-tiedown valves each includes a movable sealing surface integrally formed with said first and second reset pistons, respectively.

6. (original) The control valve system of claim 3 further comprising:

first and second crossover chambers communicating with said second and first inlet poppets, respectively, and with said first and second pilot timing chambers, respectively; and

first and second return chambers disposed at the other end of said first and second movable valve units, respectively, wherein said first and second return chambers communicate with said second and first crossover chambers, respectively;

wherein said first and second anti-tiedown valves each includes a movable sealing surface integrally formed with said first and second reset pistons, respectively, and a valve seat integrally formed with said first and second return chambers,

respectively.

7. (original) The control valve system of claim 3 further comprising first and second piston return springs for urging said first and second reset pistons away from said first and second movable valve units, respectively, for closing said first and second anti-tiedown valves.

8. (currently amended) The control valve system of claim ~~6~~ 7 wherein said first piston return spring provides a spring force greater than said second piston return spring.

9. (original) The control valve system of claim 3 further comprising:

first and second crossover chambers communicating with said second and first inlet poppets, respectively, and with said first and second pilot timing chambers, respectively; and

first and second return chambers disposed at the other end of said first and second movable valve units, respectively, wherein said first and second return chambers communicate with said second and first crossover chambers, respectively;

wherein said first and second reset pistons have each have a first working surface area exposed to said first and second return chambers greater than a second working surface area exposed to said pressurized fluid from said reset port.

10. (original) A method of operating a control valve system wherein said control valve system includes a housing defining an inlet, an outlet and an exhaust, said inlet being adapted to receive pressurized fluid, wherein said control valve system includes a first movable valve unit including a first exhaust poppet and a first inlet poppet, wherein said first movable valve unit is movable to an actuated position, a deactuated position, and an intermediate position, wherein said control valve system includes a second movable valve unit including a second exhaust poppet and a second inlet poppet, wherein said second movable valve unit is movable to an actuated

position, a deactuated position, and an intermediate position, wherein said control valve system includes first and second pilot valves disposed at one end of said first and second movable valve units, respectively, that are activated to selectably urge said first and second movable valve units to said respective actuated positions, wherein said control valve system includes first and second pilot timing chambers for storing pressurized fluid to be provided to said first and second pilot valves, respectively, wherein said control valve system includes a reset flow restrictor coupled to said reset port, wherein said control valve system includes first and second reset pistons for being extended to drive said first and second movable valve units to their deactuated positions, respectively, in response to pressurized fluid from said reset port, wherein said second reset piston communicates with said reset port via said flow restrictor, and wherein said first reset piston communicates with said reset port via a path not including said flow restrictor, wherein said control valve system includes a vent coupled to atmosphere, and wherein said control valve system includes first and second anti-tiedown valves each coupled between said vent and said second and first pilot timing chambers, respectively, said anti-tiedown valves being opened in response to said first and second reset pistons being extended, respectively, said method comprising the steps of:

connecting a source of pressurized fluid to said reset port;

actuating said first and second reset pistons in response to said pressurized fluid to reset said first and second movable valve units, respectively;

venting said first and second pilot chambers when said first and second reset pistons are actuated, wherein said venting prevents said first and second movable valve units from moving out of said deactuated positions, respectively;

removing said source of pressurized fluid from said reset port;

retracting said first reset piston so that said second pilot chamber receives pressurized fluid while said first pilot chamber continues to be vented;

retracting said second reset piston after a predetermined delay time following retraction of said first reset piston, said predetermined delay time being sufficient to allow said second pilot chamber to become substantially pressurized; and

if said second pilot valve is actuated when said second reset piston is retracted, then said pressurized fluid in said second pilot chamber driving said second movable valve unit out of said deactuated position during a time that pressurized fluid in said first pilot chamber is insufficient to drive said first movable valve unit out of said deactuated position, thereby resulting in a faulted condition of said control valve system.

11. (original) The method of claim 10 wherein said control valve system further includes first and second piston return springs for retracting said first and second reset pistons.

12. (original) The method of claim 10 wherein, if said second pilot valve is not actuated when said second reset piston is retracted, then said first pilot chamber becomes substantially pressurized, thereby completing said resetting of said double valve.